1118-35-105 **Milena Stanislavova***, Department of Mathematics, 405, Snow Hall, University of Kansas, Lawrence, KS 66045, and **Atanas Stefanov** and **Sevdzhan Hakkaev**. *Periodic traveling waves of the short pulse equation:existence and stability.*

We construct various periodic traveling wave solutions of the Ostrovsky/Hunter- Saxton/short pulse equation and its KdV regularized version.For the regularized short pulse model with small Coriolis parameter, we describe a family of periodic traveling waves which are a perturbation of appropriate KdV solitary waves. We show that these waves are spectrally stable. For the short pulse model, we construct a family of traveling peakons with corner crests. We show that the peakons are spectrally stable as well. (Received January 26, 2016)